

REMARKS/ARUGMENTS

Upon entry of this amendment, claims 1, 24, 25 and 26 will be amended, whereby claims 1-26 will remain pending. Claims 1, 24, 25 and 26 are independent claims.

The claims are amended herein in accordance with the Examiner's suggestion that the claims be written to further clarify the alternative claim language. However, the language utilized in the claims is alternative language, and not Markush language as recommended by the Examiner. Moreover, a colon in claim 24 has been changed to a semicolon. Applicants respectfully submit that the claim amendments should be considered to have been made for cosmetic purposes, and should not be considered to raise any estoppel.

Reconsideration and allowance of the application are respectfully requested.

Response to Formal Matters

Applicants note that the Cover Sheet of the Office Action indicates that an Information Disclosure Statement(s)(PTO-1449) Paper No. 5 is attached. However, a copy is not in Applicants' file. Accordingly, Applicants once again respectfully request that the Examiner include an initialed copy of the Form PTO-1449 so that Applicants' file can reflect the Examiner's consideration of the Information Disclosure Statement filed August 2, 2001.

Applicants also express appreciation for the acknowledgment in the Office Action of the claim of foreign priority as well as receipt of the certified copy of the priority document.

Applicants note that the drawings submitted with the application have not been objected to, whereby Applicants assume that the drawings submitted with the application meet formality requirements, whereby further action is not required on the part of the Applicants.

Response To Maintaining Of The Restriction Requirement

Applicants note that the Restriction Requirement has been maintained, and has been made final. In particular, it is noted that Group I, i.e., claims 1-23 and 26, are under prosecution, and that claims 24 and 25 stand withdrawn.

In response, Applicants respectfully request rejoinder of the non-elected process claims 24 and 25 upon allowance of the elected group of invention.

Prior Art Rejections

The following rejections are set forth in the Official Action:

(a) Claims 1-4, 6, 8, 10, 12, 14, 16, 21 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsubaguchi et al. (hereinafter "Matsubaguchi"), U.S. Patent No. 6,030,689.

(b) Claims 5, 7, 9, 11, 13, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsubaguchi, U.S. Patent No. 6,030,689, in view of Hisano et al. (hereinafter "Hisano"), U.S. Patent No. 6,440,545.

(c) Claims 18-20, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsubaguchi, U.S. Patent No. 6,030,689, in view of Hisano, U.S. Patent No. 6,440,545 and Ejiri et al. (hereinafter "Ejiri"), U.S. Patent No. 6,143,403.

In response to the rejections of record, Applicants note the following:

Applicants' invention as recited in independent claim 1 is directed to a multilayer magnetic recording medium which comprises, on a nonmagnetic substrate, at least one upper binder-containing magnetic recording layer which has a thickness of less than 0.5 μm and contains finely divided magnetic pigment having a coercive force H_c of 80 - 250 kA/m, and at least one lower binder-containing layer which contains an isotropic magnetically soft pigment which comprises $\gamma\text{-Fe}_2\text{O}_3$, Fe_3O_4 or a solid solution of these components, the coercive force H_c of the lower layer being less than 4 kA/m and the anhysteretic susceptibility of the lower layer at 2 kA/m being greater than 7.

Moreover, Applicants' independent claim 26 is directed to a magnetic tape, magnetic card or floppy disk comprising a multilayer magnetic recording medium which comprises, on a nonmagnetic substrate, at least one upper binder-containing magnetic recording layer which has a thickness of less than 0.5 μm and contains a finely divided magnetic pigment having a coercive force H_c of 80 - 250 kA/m, and at least one lower binder-containing layer which contains an isotropic magnetically soft pigment which comprises $\gamma\text{-Fe}_2\text{O}_3$, Fe_3O_4 or a solid solution of these components, the coercive force H_c of the lower layer being less than 4 kA/m and the anhysteretic susceptibility of the lower layer at 2 kA/m being greater than 7.

Thus, amongst other features recited in Applicants' claims, Applicants claims' include at least one lower binder-containing layer which contains an isotropic magnetically soft pigment which comprises $\gamma\text{-Fe}_2\text{O}_3$, Fe_3O_4 or a solid solution of these components, the coercive force H_c of the lower layer being less than 4 kA/m and the anhysteretic susceptibility of the lower layer at 2 kA/m being greater than 7. The prior art of record does not show this layer alone and/or in combination with the

P20739.A06

remaining elements recited in the Applicants' claims. For example, the rejections of record do not include any indication that the documents utilized therein teach or suggest, for example, and the anhysteretic susceptibility of the lower layer at 2 kA/m being greater than 7.

As noted, for example, in paragraphs [0026] and [0027] of the present specification, surprisingly, the recording medium according to the present invention has a flat frequency response which has lower values at long recording wavelengths than, for example, conventional recording media having the same thickness of the recording layer and of the nonmagnetic lower layer. Consequently, there are no problems of magnetic saturation of the head and associated signal distortion at long wavelengths. Moreover, the magnetically soft lower layer partially short-circuits the magnetic flux of the upper layer so that the magnitude of the signal level is reduced. This effect is wavelength-dependent and is most pronounced at long wavelengths. The result is a flattening of the frequency response, the effect of which in the region of long recording wavelengths is that saturation of the magnetorestrictive read head no longer occurs, while only a marginal reduction in the signal level has to be accepted in the region of short recording wavelengths.

If the grounds of rejection are maintained, it is respectfully requested that the rejection establish where each of the claimed features, including the anhysteretic susceptibility of the lower layer at 2 kA/m being greater than 7, is taught or suggested in the prior art.

Thus, Matsubaguchi does not teach or suggest the presently claimed invention.

Moreover, with respect to the obviousness rejection utilizing Hisano, Applicants note that while Hisano discloses the use of smaller crystallite sizes, there is no motivation to modify the disclosure of Matsubaguchi with crystallite sizes as discloses in Hisano. In particular, Matsubaguchi

P20739.A06

discloses certain particles sizes, and one having ordinary skill in the art would not have been motivated to vary these sizes in the absence of some direction in Matsubaguchi.

Still further, Applicants note that Hisano has an effective filing date of August 9, 2000, which is after the priority date of the instant application. Therefore, if the rejection is maintained, Applicants will consider the filing of an English translation of the priority application to antedate Hisano.

Still further, whether or not there is any motivation for combination, Ejiri with Matsubaguchi and Hisano, the instantly claimed invention would not be at hand for the reasons set forth above.

For the reasons set forth above, Applicants' disclosed and claimed invention are not taught or suggested by the prior art, whereby the claims are patentable over the prior art of record, and the rejections should be withdrawn.

CONCLUSION

In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections of record, and allow each of the pending claims.

Applicants therefore respectfully request that an early indication of allowance of the application be indicated by the mailing of the Notices of Allowance and Allowability.

Should the Examiner have any questions regarding this application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,
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